SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier
E-NOX Shine

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses

Sectors of use [SU]
Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Industrial uses
Products Category [PC]
PC-CLN-2 - All-purpose (or multi-purpose) non-abrasive cleaners

Uses advised against
Do not use for medical-clinical purposes.

1.3 Details of the supplier of the safety data sheet
Supplier
Bio-Circle Surface Technology GmbH
Street : Berensweg 200
Postal code/City : 33334 Gütersloh
Telephone : +49 5241 9443 0
Telefax : +49 5241 9443 44
Information contact :

Product application:	ae@bio-circle.de
Orders:	www.bio-circle.de service@bio-circle.de
Current safety data sheet:	www.bio-circle.de [DE + EN] service@bio-circle.de
Questions about the contents of the safety data sheet:	ehs@bio-circle.de

1.4 Emergency telephone number
+49 5241 9443 51 during normal office hours
(Monday to Thursday from 8 am to 4 pm and Friday from 8 am to 3 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [CLP]
None

2.2 Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Special rules for supplemental label elements for certain mixtures
EUH210 Safety data sheet available on request.

2.3 Other hazards
Adverse human health effects and symptoms
This product does not contain any substance in concentrations of 0.1% or more that exhibits endocrine-disrupting properties in humans.

Adverse environmental effects
This product does not contain any substance in concentrations of 0.1% or more that exhibits endocrine-disrupting

properties toward non-target organisms.
This product does not contain any substance classified as a PBT or vPvB in concentrations of 0.1% or more.
This product does not contain any substance classified as a PMT or vPvM in concentrations of 0.1% or more.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics < 2% aromatics ; REACH No. : 01-2119453414-43-XXXX ; EC No. : 920-107-4

Weight fraction : ≥ 1 - < 5 %
Classification 1272/2008 [CLP] : Asp. Tox. 1 ; H304 EUH066

Hydrocarbons, C13-C16, n-alkanes, isoalkanes < 0,03% aromatics ; REACH No. : 01-2119826592-36-XXXX ; EC No. : 934-954-2

Weight fraction : ≥ 1 - < 5 %
Classification 1272/2008 [CLP] : Asp. Tox. 1 ; H304

ALCOHOLS, C16-18- AND C18 UNSAT., ETHOXY., PROPOX. (> 2.5 MOLES EO/PO) ; REACH No. : (Polymer) ; EC No. : 932-102-4; CAS No. : 677026-24-3

Weight fraction : ≥ 2,5 - < 5 %
Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Aquatic Acute 1 ; H400 Aquatic Chronic 3 ; H412

Further ingredients

WHITE MINERAL OIL (PETROLEUM) ; REACH No. : 01-2119487078-27-XXXX ; EC No. : 232-455-8; CAS No. : 8042-47-5

Weight fraction : ≥ 15 - < 20 %

Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

When in doubt or if symptoms are observed, get medical advice.

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps.

Following inhalation

Remove casualty to fresh air and keep warm and at rest.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin.

After eye contact

Protect uninjured eye. In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion

Rinse mouth thoroughly with water. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water spray jet ; Foam ; Extinguishing powder ; Carbon dioxide (CO2) ; Sand

Unsuitable extinguishing media
Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
In case of fire may be liberated: Carbon monoxide , Carbon dioxide (CO2) , Nitrogen oxides (NOx)

5.3 Advice for firefighters
In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Special danger of slipping by leaking/spilling product. Use personal protection equipment.

6.2 Environmental precautions
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up
Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Wash with plenty of water. Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections
Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Keep container tightly closed.

7.2 Conditions for safe storage, including any incompatibilities
Keep/Store only in original container. Protect against : Frost .

Requirements for storage rooms and vessels
The floor should be leak tight, jointless and not absorbent.
Suitable container/equipment material: Stainless steel ; Polyethylene (PE)

Hints on joint storage
Storage class (TRGS 510) : 12
Do not store together with
Food and feedingstuffs

Further information on storage conditions
Storage temperature : 2°C - 35°C

7.3 Specific end use(s)
Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values
WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5

Limit value type (country of origin) :	TRGS 900 (D)
Parameter :	A: respirable fraction
Limit value :	5 mg/m³

Peak limitation :	4(II)
Remark :	DFG, Y
Version :	01.09.2015

8.2 Exposure controls

Personal protection equipment

Eye/face protection



Wear suitable safety goggles in case of splash.

Suitable eye protection
EN 166.

Skin protection

Hand protection



Suitable gloves type : EN 374.
Suitable material : NBR (Nitrile rubber)
Breakthrough time : 480 min.
Thickness of the glove material : 0.4 mm
Remark : The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection

Usually no personal respirative protection necessary.

General information

Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. P362+P364 - Take off contaminated clothing and wash it before reuse. P264 - Wash hands thoroughly after handling.

8.3 Additional information

The minimum requirements for safety and health protection when employees use personal protective equipment at work (89/656/EEC) must be observed.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid

Colour : white

Odour

weak ; like: Hydrocarbons, aliphatic.

Safety characteristics

Melting point/freezing point :	(1013 hPa)	<=	0	°C	
Initial boiling point and boiling range :	(1013 hPa)	approx.	100	°C	
Flash point :			not relevant		DIN EN ISO 13736

Auto-ignition temperature :			none		
Flammability :			non-flammable		
Lower explosion limit :			not relevant		
Upper explosion limit :			not relevant		
Vapour pressure :	(20 °C)	<	24	hPa	Calculated
Density :	(20 °C)	approx.	0,94	g/cm³	
Solvent separation test :	(20 °C)		not relevant		
Water solubility :	(20 °C)		completely miscible		
pH :	(20 °C)	approx.	11,4		
Cinematic viscosity :	(20 °C)	<	30	mm²/s	
Relative vapour density :	(20 °C)		not determined		
Maximum VOC content (2010/75/EC) :		<	1	Weight-%	
Maximum VOC content (Switzerland VOCV; SR 814.018) :		<	1	Weight-%	
Taxable VOC content (Switzerland VOCV; SR 814.018 Annex 1) :		<	1	Weight-%	

9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No known hazardous decomposition products.
Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Acute oral toxicity

Parameter :	ATEmix
Exposure route :	Oral
Effective dose :	> 2000 mg/kg

Acute dermal toxicity

Parameter :	ATEmix
Exposure route :	Dermal
Effective dose :	> 2000 mg/kg

Acute inhalation toxicity

Parameter :	ATEmix
Exposure route :	Inhalation
Effective dose :	> 20 mg/l

Corrosion

Skin corrosion/irritation

Parameter :	Skin corrosion/irritation (ALCOHOLS, C16-18- AND C18 UNSAT., ETHOXY., PROPOX. (> 2.5 MOLES EO/PO) ; CAS No. : 677026-24-3)
Species :	Rabbit
Result :	Irritant
Method :	OECD 404

Assessment/classification

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

No further relevant information available.

Respiratory or skin sensitisation

Skin sensitisation

No further relevant information available.

Sensitisation to the respiratory tract

No further relevant information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No further relevant information available.

Germ cell mutagenicity

No further relevant information available.

Reproductive toxicity

No further relevant information available.

STOT-single exposure

No further relevant information available.

STOT-repeated exposure

No further relevant information available.

Aspiration hazard

No further relevant information available.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain any substance in concentrations of 0.1% or more that exhibits endocrine-disrupting properties in humans.

Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

Other adverse effects

May be absorbed through the skin. Repeated exposure may cause skin dryness or cracking.

Additional information

Preparation not tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter :	LC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	96 h
Evaluation :	Harmless to fish up to the concentration tested.

Method :	OECD 203
Parameter :	LC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 100 mg/l
Exposure time :	48 h
Evaluation :	Harmless to daphnia up to the tested concentration.
Method :	OECD 202
Parameter :	EC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Chronic (long-term) daphnia toxicity
Effective dose :	> 1000 mg/l
Exposure time :	21 D
Method :	OECD 211
Parameter :	LL50 (Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics < 2% aromatics)
Species :	Oncorhynchus mykiss (Rainbow trout)
Effective dose :	> 1000 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LL50 (Hydrocarbons, C13-C16, n-alkanes, isoalkanes < 0,03% aromatics)
Species :	Oncorhynchus mykiss (Rainbow trout)
Effective dose :	> 1000 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LC50 (ALCOHOLS, C16-18- AND C18 UNSAT., ETHOXY., PROPOX. (> 2.5 MOLES EO/PO) ; CAS No. : 677026-24-3)
Species :	Cyprinus carpio (Common Carp)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 1 - 10 mg/l
Exposure time :	96 h
Method :	OECD 203

Acute (short-term) toxicity to crustacea

Parameter :	EL50 (Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics < 2% aromatics)
Species :	Daphnia magna (Big water flea)
Effective dose :	> 1000 mg/l
Exposure time :	48 h
Method :	OECD 202
Parameter :	EL50 (Hydrocarbons, C13-C16, n-alkanes, isoalkanes < 0,03% aromatics)
Species :	Daphnia magna (Big water flea)
Effective dose :	> 1000 mg/l
Exposure time :	48 h
Method :	OECD 202
Parameter :	EC50 (ALCOHOLS, C16-18- AND C18 UNSAT., ETHOXY., PROPOX. (> 2.5 MOLES EO/PO) ; CAS No. : 677026-24-3)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 0,1 - 1 mg/l
Exposure time :	48 h
Method :	OECD 202

Acute (short-term) toxicity to algae and cyanobacteria

Parameter :	EC50 (ALCOHOLS, C16-18- AND C18 UNSAT., ETHOXY., PROPOX. (> 2.5 MOLES EO/PO) ; CAS No. : 677026-24-3)
Species :	Desmodesmus subspicatus
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	> 0,1 - 1 mg/l
Exposure time :	72 h

Method :	OECD 201
Toxicity to microorganisms	
Parameter :	EC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Species :	Bacteria toxicity
Effective dose :	> 1000 mg/l
Exposure time :	40 h
Parameter :	EC10 (ALCOHOLS, C16-18- AND C18 UNSAT., ETHOXY., PROPOX. (> 2.5 MOLES EO/PO) ; CAS No. : 677026-24-3)
Species :	Pseudomonas putida
Evaluation parameter :	Bacteria toxicity
Effective dose :	> 2000 mg/l
Exposure time :	5,33 h

12.2 Persistence and degradability

Biodegradation

Parameter :	Biodegradation (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Inoculum :	Degree of elimination
Evaluation parameter :	Aerobic
Degradation rate :	24 %
Test duration :	28 D
Method :	OECD 301B
Parameter :	BOD (% of ThOD) (Hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics < 2% aromatics)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Degradation rate :	71 %
Test duration :	28 D
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 301F
Parameter :	BOD (% of ThOD) (Hydrocarbons, C13-C16, n-alkanes, isoalkanes < 0,03% aromatics)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Degradation rate :	74 %
Test duration :	28 D
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 306
Parameter :	Biodegradation (ALCOHOLS, C16-18- AND C18 UNSAT., ETHOXY., PROPOX. (> 2.5 MOLES EO/PO) ; CAS No. : 677026-24-3)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Degradation rate :	> 70 %
Test duration :	28 D
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 301A
Parameter :	Biodegradation (ALCOHOLS, C16-18- AND C18 UNSAT., ETHOXY., PROPOX. (> 2.5 MOLES EO/PO) ; CAS No. : 677026-24-3)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Degradation rate :	> 60 %
Test duration :	28 D
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 301B

According to the recipe, contains no AOX. The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil
No information available.

12.5 Results of PBT and vPvB assessment
This product does not contain any substance classified as a PBT or vPvB in concentrations of 0.1% or more.

12.6 Endocrine disrupting properties
This product does not contain any substance in concentrations of 0.1% or more that exhibits endocrine-disrupting properties toward non-target organisms.

12.7 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Directive 2008/98/EC (Waste Framework Directive)
Before intended use

Waste codes/waste designations according to EWC/AVV

20 01 30 (Detergents other than those mentioned in 20 01 29)

Other disposal recommendations

Dispose of waste according to applicable legislation. Dispose of contents/container to an appropriate recycling or disposal facility. Contaminated packages must be completely emptied and can be re-used following proper cleaning (Water (with cleaning agent)). Handle contaminated packages in the same way as the substance itself.

13.2 Additional information
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

14.1 UN number or ID number
No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name
No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)
No dangerous good in sense of these transport regulations.

14.4 Packing group
No dangerous good in sense of these transport regulations.

14.5 Environmental hazards
No dangerous good in sense of these transport regulations.

14.6 Special precautions for user
None

14.7 Maritime transport in bulk according to IMO instruments
No transport as bulk according to IBC Code.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 75

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Other regulations (EU)

Labelling for contents according to regulation (EC) No. 648/2004

< 5 % non-ionic surfactants
15 - 30 % aliphatic hydrocarbons

National regulations

Technische Anleitung zur Reinhaltung der Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 5 %

Water hazard class

Classification according to AwSV - Class : 1 (Slightly hazardous to water)

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

01. Relevant identified uses of the substance or mixture and uses advised against · 02. Other hazards · 03. Mixtures · 07. Conditions for safe storage, including any incompatibilities · 09. Information on basic physical and chemical properties

16.2 Abbreviations and acronyms

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road AOX: Adsorbed Organically Bound Halogens
AwSV: German Regulations on Facilities for the Handling of Substances Hazardous to Water
CAS: Chemical Abstracts Service (Department of American Chemical Society)
CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL: Derived No Effect Level
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances
EWC/AVV: European Waste Classification Catalog / Waste List Regulation (german integration) GHS: Globally Harmonized System of Classifiaction and Labelling of Chemicals
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Code for Dangerous Goods
IMO: International Maritime Organization
Index No.: Identification number in Annex VI of the CLP
PBT: persistent, bioaccumulative and toxic according to REACH
PMT: persistent, mobile and toxic according to REACH
PNEC:Predicted No Effect Concentration
REACH: Regulation (EC) No. 1907/2006
RID: Regulations for the International Transport of Dangerous Goods by Rail (Règlement concernant le transport international ferroviaire de marchandises dangereuses)
STEL: (Short-Term Exposure Limit)
TLV: Threshold Limit Value
TRGS: German Technical Rules for Hazardous Substances ("Technische Regel für den Umgang mit Gefahrstoffen")
TWA: Time-Weighted Average
UFI: Unique Formula Identifier
VOC: volatile organic compound
vPvB: very persistent and very bioaccumulative according to REACH
vPvM: very persistent and very mobile according to REACH
WGK: German Water Hazard Class ("Wassergefährdungsklasse")

16.3 Key literature references and sources for data

AwSV: German Regulations on Facilities for the Handling of Substances Hazardous to Water
DGUV: GESTIS-Stoffdatenbank
Directive 2004/42/EC (on the limitation of emissions of volatile organic compounds resulting from the use of organic solvents in certain paints and varnishes and in vehicle refinishing products)

Directive 2010/75/EU (on emissions from industrial and livestock farming activities)
Directive 92/85/EEC (on maternity protection)
Directive 94/33/EC (on the protection of young people at work)
EC_Safety Data Sheet of Suppliers
ECHA: Classification And Labelling Inventory
ECHA: Registered Substances
GDL: Gefahrstoffdatenbank der Länder
Industrial Safety Regulation – BetrSichV
Major Accidents Ordinance – 12th BImSchV
Regulation (EC) No 1223/2009 (on cosmetic products – Annex III)
Regulation (EC) No 2019/1021 (on persistent organic pollutants)
Regulation (EC) No 2019/1148 (on the marketing and use of explosives precursors)
Regulation (EC) No 528/2012 (on the making available on the market and use of biocidal products)
Regulation (EC) No 648/2004 (on detergents)
Regulation (EC) No 649/2012 (on the export and import of dangerous chemicals)
Regulation (EC) No. 1272/2008 of the European Parliament and of the Council Regulation (EC) No. 1907/2006
|-> REGULATION (EU) 2020/878 of 18 June 2020
Technical Instructions on Air Quality Control – TA Luft
UBA Rigoletto: Wassergefährdende Stoffe

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

16.5 Relevant H- and EUH-phrases (Number and full text)

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.